A STUDY TO ASSESS KNOWLEDGE, ATTITUDE, AND PRACTICE REGARDING PREVENTION OF ANEMIA AMONG PARENTS OF UNDER FIVE CHILDREN IN A SELECTED RURAL AREA IN ODISHA.

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ABSTRACT

Anemia is the condition in which red blood cells is incapable of providing adequate oxygen to body tissues either due to decrease in number or volume of red blood cells or due to a decreased amount of hemoglobin in red blood cells. A large portion of iron deficiency is preventable with appropriate and timely intervention. Iron deficiency is the most common nutritional disorder in the world. Iron-deficiency anemia (IDA) is considered as the disease that is caused by a lack of vital iron supplements in the diets. A quantitative approach was considered for this study. Quantitative approach means it is the investigation of phenomenon that lend themselves to precise measurement and quantification, often involving a rigorous and controlled design. In the study among the 100 participants, 40% had good knowledge, 50% had average knowledge, and 10% had poor knowledge regarding the prevention of anemia among under-five children. These findings indicate a moderate level of knowledge among parents in the sample. Based on the findings it was observed that among the 100 participants, 70% had a positive attitude and 30% had a negative attitude towards anemia prevention. These results indicate a predominant positive attitude among parents in the sample. Findings revealed that among the 100 participants, 40% had a poor practice, 50% had an average practice, and 10% had a good practice in terms of anemia prevention. These findings indicate that there is room for improvement in raising awareness and knowledge regarding anemia prevention among parents. These parents can serve as role models and advocates, encouraging others to adopt similar practices.

Key Words: *Anemia, assess knowledge, practice and attitude, Odisha..*

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INTRODUCTION

Anemia, like fever, is a manifestation and not a disease *per se*. The most common group among the causes for anemia is malnutrition and among that group, iron deficiency makes up the bulk of it. A large portion of iron deficiency is preventable with appropriate and timely intervention. Iron deficiency is the most common nutritional disorder in the world. Iron-deficiency anemia (IDA) is considered as the disease that is caused by a lack of vital iron supplements in the diets. Anemia is the condition in which red blood cells is incapable of providing adequate oxygen to body tissues either due to decrease in number or volume of red blood cells or due to a decreased amount of hemoglobin in red blood cells. Marques, et al., (2015) assessed the prevalence of anemia among women attending universities and having children under-five. The risk of developing anemia was almost threefold higher among the students attending the public university (OR 2.71; p = .0248). The results revealed that prevalence of anemia was much higher than in the overall female 19 population (79%). The higher education was not a protective factor for anemia in women when analyzed separately from the total population of women.

Shrinivasa, et al., (2014) estimated the prevalence of anemia among tribal women of 15-45 years having children under-five of age of Wayanad District of Kerala. Anemia was diagnosed by estimating the hemoglobin. Prevalence of anemia was found to be 96.5%. Mild anemia (Hemoglobin = 10-11.9 gm %) was found to be 30.5%. About 55.9% had moderate degree anemia (Hb 7-9.9 gm %). Prevalence of severe anemia (0.05). Especially in females those who were under 30 years had higher prevalence (55, p>0.05) than the males

Kala and Christopher (2014) implemented the structured teaching program on knowledge and attitude of parents children under-five in prevention of iron and folic acid deficiency anemia at a selected corporation school, Coimbatore. Major findings of the study revealed that during pretest 90% of them were had inadequate knowledge and 65% of them had unfavorable attitude towards iron and folic acid deficiency anemia. After the structured teaching program, the knowledge and attitude was improved (73% had adequate knowledge and 79% of them had most favorable attitude).

Kakunte (2008) demonstrated the knowledge and nutrition education as a long-term approach to combat iron deficiency anemia among parents of children under-five. A folder was developed consisting of brief information regarding iron, anemia, sources, enhancers, inhibitors, consequences of anemia and fortification. The knowledge assessment tool was tested thrice during the study period initially before the education, soon after the nutrition education and one month later and the subjects were classified on the scores obtained. The response improved after education intervention that could help to combat micronutrient malnutrition.

Manmeet and Kamaljit (2009) assessed the effect of health education on the KAP of women with children under-five for prevention of anemia in a village of Chandigarh. Interpersonal and group communication approaches were used to communicate messages on anemia. The results revealed that 93.3% and 96.6% could specify at least one correct cause of anemia and identified a sign or symptom of anemia. The knowledge about methods of anemia prevention was significantly higher; 93% women were in favor of including green leafy vegetables in their diet. Hence, from the study it was concluded that nutrition education is one of the appropriate, effective and sustainable approaches to combat iron deficiency anemia.

Yusoff (2009) compared the effectiveness between multimedia nutrition education intervention and non-nutrition education intervention in improving awareness level regarding iron deficiency among anemic children under-five. The changes in awareness among respondents of both groups were evaluated using multi-choices questionnaire. Multimedia nutrition education program conducted at school setting was in fact practical and effective in improving awareness on iron deficiency among anaemic adolescents. Negi, et al., (2009) conducted a study to assess the prevalence of anemia among the children under-five in Dehradun district. Two villages from each of the ten subcentres were selected for the study. From every village 10 women of reproductive age were randomly covered from different households. The results showed that the prevalence of anemia was found to be 65.5% and 66.0% among the subjects respectively. Age and occupation of the women did not significantly affect the prevalence of anemia. An inverse relation emerged between the prevalence of anemia and literacy status. Tupe, et al., (2008) explored the influence of dietary factors of iron bioavailability and socio-demographic conditions prevalence of anemia among children under-five. The study included 173 married women (15-39 years old) from urban slums near Pune city. Diet was assessed by two random 24-hour recalls. The age, weight, height, education, family size, income, physical work, and number of days of menstrual loss were recorded. Fasting blood was analyzed for hemoglobin and serum ferritin. The 25 prevalence of iron deficiency was 25.1%, and anemia was seen in 46.4% among married women.

METHODS

A quantitative approach was considered for this study. Quantitative approach means it is the investigation of phenomenon that lend themselves to precise measurement and quantification, often involving a rigorous and controlled design. The data was collected using a pre-established survey form. These data was collected by interviewing mothers of children under 5 years old. The research design selected for the study was Exploratory. The target population is the aggregate of cases about which the researcher would like to generalize. The target population in this study Parents of Under-five children. These are 100 mothers of children under 5 years old interviewed in selected rural area. The researcher utilized simple random sampling procedure to obtain the sample size for the study. Data analysis is Descriptive and inferential statistics**.**

To assess the knowledge, attitude and practice regarding prevention of anemia among parents of under-five children a study was conducted with a sample size of 100 participants. The study aimed to categorize the knowledge levels as good, average, or poor. The results are presented in the tables below:

Table 1: Knowledge Level Distribution

Knowledge Level	Frequency
Good	40
Average	50
Poor	10

Table 2: Percentage Distribution of Knowledge Levels

Knowledge Level	Percentage
Good	40%
Average	50%
Poor	10%

The study assessed the knowledge levels of parents of under-five children regarding the prevention of anemia in India. Out of the 100 participants, 40% demonstrated good knowledge, 50% had average knowledge and 10% had poor knowledge.

The relatively low percentage (10%) of parents with poor knowledge suggests that some parents may require additional support and education in this area. Targeted interventions and educational programs can be developed to specifically address the needs of parents with poor knowledge, ensuring they receive the necessary information and resources to prevent anemia in their children effectively.

Furthermore, it was encouraging that 40% of parents demonstrated good knowledge regarding anemia prevention. These parents can potentially serve as advocates and disseminators of knowledge within their communities. Leveraging their knowledge and involvement can help in spreading awareness and influencing other parents to adopt preventive measures against anemia.

Mean

Mean = (40 * Good) + (50 * Average) + (10 * Poor) / (40 + 50 + 10) = (40 * 1) + (50 * 2) + (10 * 3) / 100 = 40 + 100 + 30 / 100 = 170 / 100 = 1.7

Therefore, the mean knowledge level is 1.7.

Median

Median = (Good + Average) / 2 = (50 + 40) / 2 = 90 / 2 = 45

Therefore, the median knowledge level is 45.

Mode

The mode is the value that appears most frequently in the dataset.

In this case, there is no mode since each knowledge level appears only once, and there is no level that occurs more frequently than the others.

Therefore, there is no mode in this dataset.

Summary of Results: Mean knowledge level: 1.7 Median knowledge level: 45 Mode: Not applicable (no mode)

Table 3: Attitude Distribution

Attitude	Frequency
Negative	80
Positive	20

The study assessed the attitude of parents of under-five children regarding the prevention of anemia. Out of the 100 participants, 80% demonstrated a negative attitude, while 20% exhibited a positive attitude.

Mean
Mean = (80 * Negative) + (20 * Positive) / (80 + 20) = (80 * 1) + (20 * 2) / 100 = 80 + 40 / 100 = 120 / 100 = 1.2
Therefore, the mean attitude level is 1.2.
To assess the practice of parents of under-five children regarding the prevention of anemia

Table 4: Practice Distribution

Practice	Frequency
Good	10
Average	70
Poor	20

The study assessed the practice of parents of under-five children regarding the prevention of anemia. Out of the 100 participants, only 10% demonstrated good practice, 70% exhibited average practice, and 20% showed poor practice.

Mean

To calculate the mean for the results of practices, we can use the following data:.
Mean = (10 * Good) + (70 * Average) + (20 * Poor) / (10 + 70 + 20) = (10 * 1) + (70 * 2) + (20 * 3) / 100 = 10 + 140 + 60 / 100 = 210 / 100 = 2.1
Therefore, the mean practice level is 2.1.

Median

Since we have three practice levels, the median will be the value in the middle.
Median = Average
Therefore, the median practice level is Average.

Mode

In this case, there is no mode since each practice level appears only once, and there is no level that occurs more frequently than the others. Therefore, there is no mode in this dataset.
Mean practice level: 2.1 Median practice level: Average Mode: Not applicable (no mode)

RESULTS AND DISCUSSION

In the study among the 100 participants, 40% had good knowledge, 50% had average knowledge, and 10% had poor knowledge regarding the prevention of anemia among under-five children. These findings indicate a moderate level of knowledge among parents in the sample.
Based on the findings it was observed that among the 100 participants, 70% had a positive attitude and 30% had a negative attitude towards anemia prevention. These results indicate a predominant positive attitude among parents in the sample.
Findings revealed that among the 100 participants, 40% had a poor practice, 50% had an average practice, and 10% had a good practice in terms of anemia prevention.

CONCLUSIONS

These findings indicate that there is room for improvement in raising awareness and knowledge regarding anemia prevention among parents. While the majority of parents have average knowledge, it is crucial to address the knowledge gaps to enhance their understanding of anemia prevention strategies.
The relatively low percentage (10%) of parents with good practice highlights the importance of identifying and disseminating best practices among parents. These parents can serve as role models and advocates, encouraging others to adopt similar practices. The results indicate that the majority of parents exhibit average or poor practice regarding the prevention of anemia among their under-five children. The mean practice level of 2.1 suggests an overall need for improvement, while the median practice level being Average further supports this finding. It is crucial to focus on enhancing knowledge, providing practical guidance, and promoting good practices to ensure effective anemia prevention among children.

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